

## ASSIGNMENT OF DAY 1

- What is your understanding of Blockchain?

Blockchain is distributed ledger technology which stores data in blocks which are connected through cryptographic functions.

Blockchain is technology based on two pillars called distributed database and cryptography.

Blockchain use distributed ledger so which makes it free from a centralized control.

Blockchain cannot be hacked because it uses digital signature of data i.e.SHA256 hashing to make data authenticate.

Data is stored on internet so data is corrupted or deleted then it can be recovered by any copy present on internet.

If anyone wants to tamper the data then he has to tamper all the copies present on internet which is nearly impossible.

Data which is written or stored on blockchain cannot be changed, it means data will never die from blockchain, this feature makes blockchain immutable

- What is the core problem Blockchain trying to solve?

Centralization is the core problem which leads to development of blockchain.

The immediate cause was international banking crisis in 2008 which was caused due to centralized nature of bank.

Centralized organization has less transparency, which may lead unauthentic transactions to happen, which reduces security of organization.

So there must a decentralized structure which will be transparent, authentic and secure.

Blockchain come up with all this features

- What are the few features which Blockchain will give you?

Distributed Nature

Immutability

Tamperproof

Security

1. Distributed Nature: Blockchain is distributed in nature .which is the best thing in blockchain ,because it makes a highly secure.

As data is distributed over the internet, it provides security and add recoverability feature

2. Immutability: As data stored on blockchain cannot be changed so there is no chance to change original data.

3. Tamperproof: Data stored on blockchain cannot be tampered because it has digital signature with data which change radically when small change in data, so there no chance to change data.

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If data is changed it will affect whole blockchain

4. Security: blockchain is storing data with its hash, if some data is changed then hash will be changed, hence data will be secure.

Data cannot be deleted because it is immutable

Data is not stored on a centralized location so there is no chance of hacking, server failure

- What all things does a Block contain?

A Block contains ,

1. Hash of previous block.
2. Data of block.
3. Hash of data and previous block.

- How the verifiability of Blockchain is has been attained?

Data of blockchain is distributed over its peers so if any one peer try to change its data ,which will be not accepted by other peers.

Data which is going to store on blockchain need to verify by all the peers.

Anyone can verify whole data in blockchain by just comparing hash of block, if hash is not matched then that cannot be verified.